**Baldwin-Wallace College**

**Division of Education**

***Teacher as Reflective Decision Maker: Contributing, Compassionate, Competent Educator***

***Technology for the K-12 Educator***

**EDU 514**

**Required Materials:  USB Jump drive to backup files. Use of digital & video cameras** (a limited number are available for checkout from the Curriculum Center in Wheeler)

**Course Goal:**

Candidates will be introduced to the multitude of issues that impact the uses of technology, the role of technological innovation, and the opportunities present by technology in the teaching and learning environment. Students will design instructional strategies to integrate technology into the curriculum and other aspects of the educational setting. Throughout this process, students will develop technology skills involving information networking (Internet, Internet searching, email, etc.), productivity tools (word processing, database, presentations, spreadsheets, etc.), multimedia website authoring, video production and editing, software evaluation, Web 2.0 tools, and distance learning.

**The ISTE National Educational Technology Standards (NETS•T) and Performance Indicators for Teachers**

Effective teachers model and apply the National Educational Technology Standards for Students (NETS•S) as they design, implement, and assess learning experiences to engage students and improve learning; enrich professional practice; and provide positive models for students, colleagues, and the community. All teachers should meet the following standards and performance indicators. Teachers:

**1. Facilitate and Inspire Student Learning and Creativity**

Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments. Teachers:

a. promote, support, and model creative and innovative thinking and inventiveness

b. engage students in exploring real-world issues and solving authentic problems using digital tools and resources

c. promote student reflection using collaborative tools to reveal and clarify students’ conceptual understanding and thinking, planning, and creative processes

d. model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments

**2. Design and Develop Digital-Age Learning Experiences and Assessments**

Teachers design, develop, and evaluate authentic learning experiences and assessments incorporating contemporary tools and resources to maximize content learning in context and to develop the knowledge, skills, and attitudes identified in the NETS•S. Teachers:

a. design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity

b. develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress

c. customize and personalize learning activities to address students’ diverse learning styles, working strategies, and abilities using digital tools and resources

d. provide students with multiple and varied formative and summative assessments aligned with content and technology

standards and use resulting data to inform learning and teaching

**3. Model Digital-Age Work and Learning**

Teachers exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society. Teachers:

a. demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations

b. collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation

c. communicate relevant information and ideas effectively to students, parents, and peers using a variety of digital-age media and formats

d. model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information

resources to support research and learning

**4. Promote and Model Digital Citizenship and Responsibility**

Teachers understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices. Teachers:

a. advocate, model, and teach safe, legal, and ethical use of digital information and technology, including respect for copyright, intellectual property, and the appropriate documentation of sources

b. address the diverse needs of all learners by using learner-centered strategies and providing equitable access to appropriate digital tools and resources

c. promote and model digital etiquette and responsible social interactions related to the use of technology and information

d. develop and model cultural understanding and global awareness by engaging with colleagues and students of other cultures using digital-age communication and collaboration tools

**5. Engage in Professional Growth and Leadership**

Teachers continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources. Teachers:

a. participate in local and global learning communities to explore creative applications of technology to improve student learning

b. exhibit leadership by demonstrating a vision of technology infusion, participating in shared decision making and community building, and developing the leadership and technology skills of others

c. evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning

d. contribute to the effectiveness, vitality, and self-renewal of the teaching profession and of their school and community

**The ISTE National Educational Technology Standards (NETS•S) and Performance Indicators for Students**

**1. Creativity and Innovation**

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes

using technology. Students:

a. apply existing knowledge to generate new ideas, products, or processes.

b. create original works as a means of personal or group expression.

c. use models and simulations to explore complex systems and issues.

d. identify trends and forecast possibilities.

**2. Communication and Collaboration**

Students use digital media and environments to communicate and work collaboratively, including at a distance,

to support individual learning and contribute to the learning of others. Students:

a. interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments

and media.

b. communicate information and ideas effectively to multiple audiences using a variety of media and formats.

c. develop cultural understanding and global awareness by engaging with learners of other cultures.

d. contribute to project teams to produce original works or solve problems.

**3. Research and Information Fluency**

Students apply digital tools to gather, evaluate, and use information. Students:

a. plan strategies to guide inquiry.

b. locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and

media.

c. evaluate and select information sources and digital tools based on the appropriateness to specific tasks.

d. process data and report results.

**4. Critical Thinking, Problem Solving, and Decision Making**

Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make

informed decisions using appropriate digital tools and resources. Students:

a. identify and define authentic problems and significant questions for investigation.

b. plan and manage activities to develop a solution or complete a project.

c. collect and analyze data to identify solutions and/or make informed decisions.

d. use multiple processes and diverse perspectives to explore alternative solutions.

**5. Digital Citizenship**

Students understand human, cultural, and societal issues related to technology and practice legal and ethical

behavior. Students:

a. advocate and practice safe, legal, and responsible use of information and technology.

b. exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.

c. demonstrate personal responsibility for lifelong learning.

d. exhibit leadership for digital citizenship.

**6. Technology Operations and Concepts**

Students demonstrate a sound understanding of technology concepts, systems, and operations. Students:

a. understand and use technology systems.

b. select and use applications effectively and productively.

c. troubleshoot systems and applications.

d. transfer current knowledge to learning of new technologies.

**Common Assignments**

Assignment 1/3

Video Assignment -Video Production assignment

Assignment correlated to the following Division Performance Outcomes:

Attributes:

\_ X \_ Content Knowledge (CK1)

\_X\_\_ Pedagogical Knowledge (PedK2, PedK6)

\_\_\_\_ Professional Knowledge

\_\_\_\_ Diversity (D2, D3)

\_X\_\_ Technology (T1, T2, T4)

\_X\_\_ Dispositions (Dis2)

**Assignment 2/3**

Mid-Term Performance Assessment of basic skills

Assignment correlated to the following Division Performance Outcomes:

Attributes:

\_ X \_ Content Knowledge (CK1, CK5)

\_X\_\_ Pedagogical Knowledge (PedK6)

\_X\_\_ Professional Knowledge (PK2)

\_\_\_\_ Diversity

\_X\_\_ Technology (T2, T8)

\_X\_\_ Dispositions (Dis2)

**Assignment 3/3**

Educational Multimedia Website-Website and Concept mapping

Assignment correlated to the following Division Performance Outcomes:

Attributes:

\_ X \_ Content Knowledge (C4,C6,C7)

\_X\_\_ Pedagogical Knowledge (PedK2, PedK4, PedK6,PedK8)

\_\_\_\_ Professional Knowledge

\_X\_\_ Diversity  (D3)

\_X\_\_ Technology (T3, T4, T5, T6, T7, T8)

\_\_\_\_ Dispositions (Dis2, Dis4)

**Expectations**

A. Any student with a documented disability (e.g., physical, learning, psychological, vision, hearing, etc.) who feels s/he may need an accommodation based on the impact of that disability should contact the Disability Services at 440-826-5936 in the Ritter Library, Room 207, to establish eligibility and to coordinate reasonable accommodations.  Students will not be accommodated unless they provide their instructors with a letter from Disability Services documenting their eligibility and delineating reasonable and appropriate accommodations. The accommodation letter must be updated each semester. Students are encouraged to meet with each professor early in the semester to discuss their disability letter regarding how to implement their accommodations in relation to specific course requirements.

The Division of Education and Baldwin-Wallace College does not discriminate in

admission or treatment of students on the basis of disability.  The College is committed to compliance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act.

B. Division of Education, Baldwin-Wallace College Student Dispositions.

**Tentative Class Schedule (Subject to Change)**

**Class 1:**

* **Course Introduction:** Instructor, Blackboard, Syllabus overview.
* Technology Skills Inventory
* Introductions via e-mail
* File management and file types
* Use an ftp client to access your B-W network drive.
* Introduction to Web 2.0
* Create and modify a Weblog (Blog) to support and enhance your teaching.
* Introduction to Google Docs.
* Create word processing documents to support and enhance your teaching.
* Introduction to the Issues in Educational Technology Blog.
* Introduction to FAQs for EDU 514 Blog.
* Introduction to Networking Participation.
* Share your Blog address and your Google account with the class.

**Class 2:**

* Use a web browser to save and organize bookmarks.
* Introduction to Personal Learning Networks (PLNs)
* Create and utilize a social bookmarking account.
* Introduction to RSS
* Introduction to web-based news aggregators.
* Introduction to Twitter.
* Become familiar with web terminology.
* Use Boolean operators to search the web for classroom resources.
* Evaluate information found on the Internet.
* Create and share an online photo album and photo slideshow.
* Research Web 2.0 tools for education.
* Share your Delicious account with the class.

**Class 3:**

* Import and manipulate digital images using a digital camera.
* Construct a simple database using a spreadsheet.
* Create a mail merge document.
* Use formulas to perform functions in a spreadsheet.
* Create charts using a spreadsheet to support and enhance your teaching.
* Use a paint program to create an original piece of artwork.
* Create a Multimedia Presentation to support and enhance your teaching.

**Class 4:**

* Create an online quiz to support and enhance your teaching.
* Design and create a Webquest to support and enhance your teaching.

**Class 5:**

* Introduction to Web-based polling.
* Introduction to Student Response Systems.
* Introduction to Interactive Whiteboard Software and Wireless Slates.
* Introduction to document cameras.
* Podcasting 101
* Create a Podcast to support and enhance your teaching.
* Handheld devices in education.
* Create a Screencast to support and enhance your teaching.

**Class 6:**

* Wikipedia and Wiki Projects.
* Develop and share a lesson or project on a Wiki.
* Create a Virtual Tour to support and enhance your teaching.

**Class 7:**

* Use chat software to facilitate collaboration in learning.
* Use teleconferencing to facilitate collaboration in learning.
* Research possible classroom applications for InfOhio (Username: learn Password: infohio)
* Research possible classroom applications for NetTrekker (Username: gse Password: 12345)
* Research possible classroom applications for United Streaming.
* Create a Video Storyboard for your Video Production Assignment.
* Video Project - Extension (Discussion Board Forum)

**Class 8:**

* Introduction to Educational Multimedia Websites.
* Introduction to online bibliography composers/managers.
* Use Inspiration (or another graphic organizer) as an Educational Multimedia Concept Mapping tool.
* Research information for your Educational Multimedia Website.
* Midterm Review

**Class 9:**

* **Midterm Recital.**

**Class 10:**

* **Video Storyboard due.**
* Create and edit digital video using a digital camera and video editing software.
* Class time to work on assignments.

**Class 11:**

* **Educational Multimedia Concept Mapping due.**
* Design and publish a multimedia website.
* Class time to work on assignments.

**Class 12:**

* **Class Assignments due.**
* **Video Discussion Board Forum Post due.**
* Class time to work on projects.

**Class 13:**

* Class time to work on projects.

**Class 14:**

* **Video Assignment due.**
* **Presentations**

**Class 15:**

* **Educational Multimedia Website due.**
* **Presentations.**

**Assignments**

**For a Complete Description of Course Assignments (See Assignments Page in Blackboard)**

**Class Assignments: Detailed instructions will be provided by the instructor for each assignment. When completed, each assignment will be added to your blog with a reflection.**

1. **Blog**
2. **Google Docs Integration**
3. **Online Photo Album and Photo Slideshow**
4. **Web 2.0 Tools Research**
5. **Online Quiz**
6. **Webquest**
7. **Podcast**
8. **Screencast**
9. **Virtual Tour**
10. **K-12 Wiki Lesson or Project**
11. **Personal Learning Network (PLN) Diagram**
12. **Evidence of Networking Participation**

**Common Assignments**

1. **Midterm Recital**
2. **Discussion Board Forum Response**
3. **Video Storyboard**
4. **Educational Multimedia Concept Mapping**
5. **Video Project – to be presented to the class.**
6. **Educational Multimedia Website – to be presented to the class.**

**Evaluation:**

**Students will be assessed using a variety of performance based instruments. Assignments will be scored using a point system based on the complexity of the task(s) involved. Completed assignments will receive full points, partially completed assignments will receive partial points, and incomplete or missing assignments will receive zero points. Points may be deducted for assignments that are not completed in a timely manner.**

**Grades will be averaged based on straight points. See the example below:**

**Midterm: 25/27**

**Assignments Rubric: 78/80**

**Video: 28/30**

**Website: 36/40**

**Total = 167/177 94% A**

**Absence:**

**If absent, please inform the instructor by e-mail. If it is a scheduled absence please inform the instructor as far in advance as possible. The instructor reserves the right to lower final grades due to absences.**

**Grading Scale:**

**A+ = 100%**

**A = 94-99%**

**A- = 90-93%**

**B+ = 87-89%**

**B = 84-86%**

**B- = 80-83%**

**C+ = 77-79%**

**C = 74-76%**

**C- = 70-73%**

**F = 0-69%**

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